Remarks/Arguments:

Claims 1-8 stand rejected. Claims 2 and 5-8 are cancelled. Thus, claims 1, 3 and 4 are pending. Claims 1, 3 and 4 have been amended. No new matter is introduced herein.

Claims 1-8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikurumi et al. (U.S. Patent No. 6,081,613) in view of Wilder et al. (U.S. Patent No. 5,262,871). Claims 2 and 5-8 have been cancelled. It is respectfully submitted, however, that the remaining claims are patentable over the art of record for the reasons set forth below.

Applicants' invention, as recited by amended claim 1, includes features neither disclosed nor suggested by the art of record, namely:

- ... reading ... a plurality of components using a camera ... pixels arrayed in a line...
- ... a pixel-selecting section for accessing the pixels individually and outputting an image signal...
- ... a processing-computing section for
  1) setting a plurality of image taken-in areas based on mounting data and component data,
  2) outputting pixel-selecting information for selecting pixels individually from among the pixels, based on widths of the respective image-taken-in areas ...
- ... a relative-movement detector ... detecting ... components moving ... by comparing position information from the relative-moving mechanism with each of the respective taken-in areas to determine whether each of the components is within the taken-in area ...
- ... a controller ... controlling said pixel-selecting section based on the pixel-selecting information and outputting a pixel signal supplied from the pixel specified by the pixel-selecting information... (Emphasis added)

These features are supported by, for example: p. 5, lines 12-16 (plurality of components); p. 12, line 11 - p. 14, line 3 (processing-computing section); p. 6, line 27-p. 7, line 16 (relative-movement detector); p. 14, lines 17-26 (controller) and Figs. 2,3, 7 and 8.

Ikurumi et al. disclose a camera that reads a plurality of line images of a printed circuit board and further combine the line images into an image picture of the printed circuit board (col. 5, 16-19). Ikurumi et al. do not disclose nor suggest Applicants' features of "...reading ... a plurality of components..." (emphasis added) and "... a pixel-selecting section for accessing the

pixels individually ..."(emphasis added). Applicants' amended claim 1 read an image of a plurality of components. Applicants' feature of accessing pixels individually allows an image to be read for each component using an image signal from selected pixels (for example, p. 12, lines 21-24). Ikurumi et al. disclose analyzing the mounting condition of elements after an image picture is generated and thus after the line image is formed (col. 7, lines 27-35). Ikurumi et al. does not disclose nor suggest reading an image of components on the circuit board or accessing pixels individually.

Ikurumi et al. further does not disclose nor suggest Applicants' features of "... a processing-computing section for ... 1) setting a plurality of image taken-areas based on mounting data and component data ... 2) outputting pixel-selecting information for selecting pixels individually ... based on widths of respective taken-in areas ..." (emphasis added). These features are neither disclosed nor suggested in Ikurumi et al.

Ikurumi et al. further does not disclose nor suggest "... a relative movement detector... components moving ... by comparing position information from the relative-moving mechanism with each of the respective taken-in areas to determine whether each of the components is within the taken-in area..." (emphasis added). Ikurumi et al. discloses a relative-motion detector that uses an encoder to detect the printed circuit board movement relative to the camera. However, the relative-motion detector of Ikurumi et al. do not compare position information with each of the respective taken-in areas. This feature is neither disclosed nor suggested by Ikurumi et al.

Ikurumi et al. further does not disclose nor suggest "... a controller... controlling said pixel-selecting section based on the pixel-selecting information ..." (emphasis added). This features is neither disclosed nor suggested by Ikurumi et al.

Ikurumi et al. is discussed above. Wilder et al. discloses a multiple resolution image sensor comprised of an array of pixels that may be randomly accessed to permit selective variation in the number of pixels that may be read out at any one reading cycle. Wilder et al. does not make up for the features that are lacking in Ikurumi et al.

Applicants' claimed features of amended claim 1 are neither disclosed nor suggested by the art of record. Accordingly, allowance of amended claim 1 is respectfully requested.

Amended claim 3 includes all of the features of claim 1 from which it depends. Thus, claim 3 is also patentable over the art of record.

Independent amended claim 4 recites features similar to amended claim 1. Again, these features are neither disclosed nor suggested by the art of record. Accordingly, independent amended claim 4 is also patentable over the art of record.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

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Dated: May 10, 2005

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The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **18-0350** of any fees associated with this communication.

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Danielle Murphy